

#2015-64

Crystal Pines Rehabilitation and Health Care Center Special Use Permit Amendment Project Review for Planning and Zoning Commission

Meeting Date: January 6, 2016

Requests: 1. Special Use Permit Amendment to allow the addition of a

parking area.

2. Variations to

a) Article 4-200 C.4 to permit a parking area, which requires maneuvering from the public street.

b) Article 4-400 F.2.c from the requirement to provide a

minimum 8-foot landscape area adjacent to a parking area. c) Article 4-800 to allow variations in the required minimum and maximum lighting levels in the parking area.

Location: 335 N. Illinois Street

Acreage: 2.7 acre site

Existing Zoning: R-1 Single-Family Residential

Surrounding Properties: North: RE Residential Estate

South: R-1 Single-Family Residential East: R-1 Single-Family Residential West: R-1 Single-Family Residential

Staff Contact: Elizabeth Maxwell (815.356.3615)

Background:

Existing Use: This site currently has a Special Use Permit for a nursing home. Over the
years, Crystal Pines has expanded to also provide rehabilitation services. As part of their
services they provide training to nursing students. As the influx of students occurs during
their training there is insufficient parking on site. The owners plan to provide 21
additional spaces.

• <u>Previous Approvals</u>:

- o 1995-15: Crystal Pines receives a Special Use Permit and variation for a side yard setback.
- o 1998-60: SUP Amendment to construct a building addition and an additional variation into the side yard setback.

Development Analysis:

General

- Request: Special Use Permit Amendment to allow the construction of a new parking area. Due to the lot constraints, they are not able to meet the minimum 8-foot interior landscape screening setback. Also, they would be working with the existing lighting on site and possibly install wall lights to illuminate the new parking area. The parking lot lighting may not meet the UDO requirements. Several parking spaces would be accessed from their drive aisle which is actually right-of-way, requiring that variation.
- <u>Land Use</u>: The land use map shows the area as Urban Residential. This land use designation allows other low-intensity residential style uses like a nursing home.
- <u>Zoning</u>: The site is zoned R-1 Single-Family Residential. The nursing home is allowed in this zoning district with a Special Use Permit, which they have.

Parking

- Parking for a nursing home is 1 space per 3 beds + 1 per employee on staff. Since Crystal Pines offers nursing training, their employee numbers fluctuate, requiring the need to provide additional parking.
- The new parking area would add 21 new parking spaces.

Landscape

- The petitioner is removing two trees, but maintaining all of the screening along the north side of the property.
- The petitioner is providing new landscaping around the parking area, which includes new parking lot islands containing trees and shrubs and screening along the west side.

Findings of fact:

SPECIAL USE PERMIT

The petitioner has requested a Special Use Permit Amendment to allow a parking lot addition that requires a variation to the landscape screening setback and from the lighting requirements. Special Uses require a separate review because of their potential to impact surrounding properties and the orderly development of the City. Section 2-400 of the Unified Development Ordinance establishes standard for all Special Uses in Crystal Lake. The criteria are as follows:

1.	That the proposed use is necessary or desirable, at the location involved, to provide a service or facility which will further the public convenience and contribute to the general welfare of the neighborhood or community.
	☐ Meets ☐ Does not meet
2.	That the proposed use will not be detrimental to the value of other properties or improvements in the vicinity.
	☐ Meets ☐ Does not meet

3.	located and this Ordin bulk regulations, par	e will comply with the regulations of the zoning district in which it is nance generally, including, but not limited to, all applicable yard and king and loading regulations, sign control regulations, watershed, lain regulations, Building and Fire Codes and all other applicable City
	Meets	Does not meet
4.	will adequately addre	e will not negatively impact the existing off-site traffic circulation; ess on-site traffic circulation; will provide adequate on-site parking juired, will contribute financially, in proportion to its impact, to ad parking systems.
	☐ Meets	Does not meet
5.	service delivery syste	e will not negatively impact existing public utilities and municipal ems and, if required, will contribute financially, in proportion to its ng of public utility systems and municipal service delivery systems.
	☐ Meets	Does not meet
6.		se will not impact negatively on the environment by creating air, on; ground contamination; or unsightly views.
	☐ Meets	Does not meet
7.	adequate screening t covers, trees and sh compatible or comple	e will maintain, where possible, existing mature vegetation; provide o residential properties; provide landscaping in forms of ground rubs; and provide architecture, which is aesthetically appealing, ementary to surrounding properties and acceptable by community letailed in Article 4, Development and Design Standards.
	☐ Meets	Does not meet
8.	other than the City suc	e will meet standards and requirements established by jurisdictions ch as Federal, State or County statutes requiring licensing procedures etions, and submit written evidence thereof.
	Meets	Does not meet
9.	That the proposed use Special Use Permit is	shall conform to any stipulations or conditions approved as part of a sued for such use.
	☐ Meets	Does not meet
10.	That the proposed use as provided in this sec	e shall conform to the standards established for specific special uses
	☐ Meets	Does not meet

ZONING ORDINANCE VARIATION

The petitioner is requesting several variations:

- a) Article 4-200 C.4 to permit a parking area, which requires maneuvering from the public street.
- b) Article 4-400 F.2.c from the requirement to provide a minimum 8-foot landscape area adjacent to a parking area.
- c) Article 4-800 to allow variations in the required minimum and maximum lighting levels in the parking area.

The Unified Development Ordinance lists specific standards for the review and approval of a variation. The granting of a variation rests upon the applicant proving practical difficulty or hardship caused by the Ordinance requirements as they relate to the property. To be considered a zoning hardship, the specific zoning requirements; setbacks, lot width and lot area must create a unique situation on this property. It is the responsibility of the petitioner to prove hardship at the Planning and Zoning Commission public hearing.

Standards

When evidence in a specific case shows conclusively that literal enforcement of any provision of this Ordinance would result in a practical difficulty or particular hardship because:

a.	The plight of the property owner is due to unique circumstances, such as, unusual surroundings or conditions of the property involved, or by reason of exceptional narrowness, shallowness or shape of a zoning lot, or because of unique topography, or underground conditions.
b.	Also, that the variation, if granted, will not alter the essential character of the locality.
	☐ Meets ☐ Does not meet
consid	he purposes of supplementing the above standards, the Commission may take into deration the extent to which the following facts favorable to the application have been ished by the evidence presented at the public hearing: That the conditions upon which the application for variation is based would not be applicable generally to other property within the same zoning classification; Meets Does not meet
b.	That the alleged difficulty or hardship has not been created by any person presently having interest in the property;
	☐ Meets ☐ Does not meet
c.	That the granting of the variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located; or
	☐ Meets ☐ Does not meet

a.	That the proposed v	ariation will not impair an adequate supply of light or air to adjacent
	property, will not un	reasonably diminish or impair the property values of adjacent property,
	will not unreasonable	ly increase congestion in the public streets, substantially increase the
	danger of fire or other	erwise endanger public safety.
	☐ Meets	Does not meet

Where the evidence is not found to justify such conditions, that fact shall be reported to the City Council with a recommendation that the variation be denied.

Comprehensive Land Use Plan 2020 Vision Summary Review:

The Comprehensive Plan designates the subject property as Urban Residential, which allows for existing and future single-family and low-intensity residential style uses. This project meets the following goal:

<u>Land Use - Commerce</u>

Goal: Encourage a diversity of high quality housing in appropriate locations throughout the city that supports a variety of lifestyles and invigorates community character.

This can be accomplished with the following supporting action:

Supporting Action: Preserve and enhance the character and livability of existing residential area with architectural and development guidelines.

Recommended Conditions:

If a motion to recommend approval of the petitioner's request to approve a Special Use Permit Amendment and Variations is made, the following conditions are recommended:

- 1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
 - A. Application (Crystal Pines, received 12/09/15)
 - B. Plat of Survey (Mionske, dated 07/02/2000, received 12/09/15)
 - C. Site Plan (Intech Consultants, Inc, dated 10/28/15, received 12/09/15)
 - D. Landscape Plan (Design Perspectives, dated 11/02/15, received 12/09/15)
- 2. The petitioner shall work with staff to provide sufficient lighting to the parking area so the area is safe, but lighting levels shall not shine into adjacent properties and meet the maximum light levels at the property lines.
- 3. Provide a Plat of Easement for the new MUE easement for the relocated watermain and fire hydrant, which includes language for the municipal maintenance agreement.
- 4. Provide wheel stops for the west side parking spaces.
- 5. The petitioner shall address all of the review comments and requirements of the Community Development, Fire Rescue, Police, and Public Works Departments.

City of Crystal Lake Development Application

Office Use	Only	· · · · · · · · · · · · · · · · · · ·
File# _		00000

Project Title: 335 N. Illinois Street/Co	rystal Pines Rehabilitation and Health Care Center
Action Requested	RECEIVI
Annexation	Preliminary PUD
Comprehensive Plan Amendment	Preliminary Plat of Subdivision
Conceptual PUD Review	Rezoning
Final PUD	X Special Use Permit Amendment
Final PUD Amendment	X Variation
Final Plat of Subdivision	Other
Petitioner Information	Owner Information (if different)
Name: Crystal Pines Rehabilitation and Health Care Center Address: c/o George Holler 7611 State Line Road, Ste. 301 Kansas City, MO 64114	Name: TI - Crystal Lake, LLC Address: 7611 State Line Road, Suite 301 Kansas City, MO 64114
Phone: 816-278-3104	Phone: 816-278-3104
Fax: 816-276-0104	Fax: 816-276-0104
E-mail: georgeh@tutera.com	E-mail: georgeh@tutera.com
Property Information	
Project Description: Parking lot expansi	on to accommodate residents, guests and
employees of facility.	
Project Address/Location: 335 N. Illinoi	s Street, Crystal Lake, IL 60014
	· · · · · · · · · · · · · · · · · · ·
PIN Number(s): 14-33-151-007	

Development Team	Please include ad	dress, phone, fax and e-mail	
Developer;			
Architect:			
	, Zukowski, Rogers, Flood & Mc L 60014; 815-459-2050; 815-459		
	rt, PE, Intech Consultants, Intech 630-966-5656;630-964-5052;		
Landscape Architect:			
Planner:			
Surveyor:			
Other:			
Signatures	JOE TUTERA	12/4/15	
PETITIONER: Print and Si	ign name (if different from owner)	Date	
As owner of the property in que	estion, I hereby authorize the seeking o	f the above requested action.	
	JOE TUTERA	12/4/15	
OWNER: Print and Sign na	ime	Date	

NOTE: If the property is held in trust, the trust officer must sign this petition as owner. In addition, the trust officer must provide a letter that names all beneficiaries of the trust.

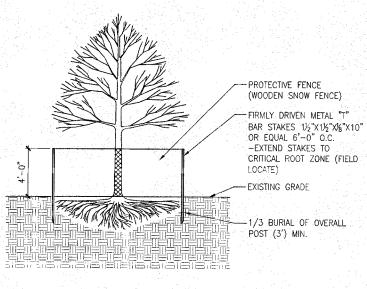
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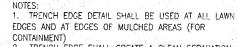
PUBLIC NOTICE BEFORE THE PLANNING AND ZONING COMMISSION OF THE CITY OF CRYSTAL LAKE IN THE MATTER OF THE APPLICATION OF TI - Crystal Lake, LLC, as Owner and Crystal Pines Rehabilitation and Health Care Center, Petitioner LEGAL NOTICE Notice is hereby given in compliance with the Unified Development Ordinance of the City of Crystal Lake, Illinois, that a public hearing will be held before the Planning and Zoning Commission of the City of Crystal Lake upon the application of TI - Crystal Lake, LLC, Owner and Crystal Pines Rehabilitation and Health Care, Petitioner, for variations relating to the property located at 335 N. Illinois Street, Crystal Lake, IL 60014 consisting of 2.76 acres, PIN No. 14-33-151-007, currently zoned R-2 and any amendment to the existing special use permit, if deemed necessary. This application is filed for the purposes of seeking any and all necessary variances to permit the expansion of the existing parking lot to provide adequate parking for business patrons and employees on the Subject Property, and specifically a variance from Article 4, Section 4-200 C.4., to allow parking access that requires maneuvering off the public street, a variation from Section 4-400 F.2.c., perimeter landscaping not abutting rights-of-way to reduce the 8-foot minimum width, any variances necessary from the requirements of Article 4-800 regarding minimum and maximum lighting standards for parking lots, and any and all variances and amendments necessary for development of this project. Plans for this project can be viewed at the City of Crystal Lake Community Development Department at City Hall. A public hearing before the Planning and Zoning Commission for this request will be held at 7:30 p.m. on Wednesday, January 6, 2016, at the Crystal Lake City Hall, 100 West Woodstock Street, at which time and place any person determining to be heard may be present. Thomas Hayden, Chair Planning and Zoning Commission City of Crystal Lake (Published in the Northwest Herald December 11, 2015.) 1140701

Erystal Lake Illinois

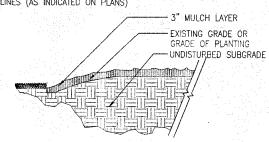


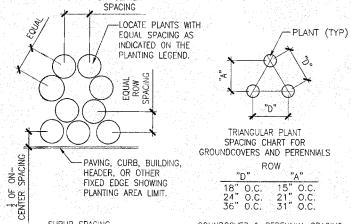
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2. TRENCH EDGE SHALL CREATE A CLEAN SEPARATION BETWEEN AREAS, AND SHALL CREATE SMOOTH AND EVEN LINES (AS INDICATED ON PLANS)

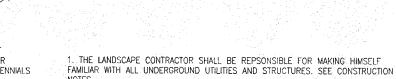




FOUAL

ON-CENTER

PLANTING AREA LIMIT



2. DO NOT WILLFULLY PROCEED WITH PLANTINGS AS DESIGNED WHEN IT IS OBVIOUS THAT OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING THE DESIGN PROCESS. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER. THE LANDSCAPE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY NECESSARY REVISIONS AND COSTS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.

3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUBCONTRACTORS AND/OR SUPPLIERS AS REQUIRED TO ACCOMPLISH PLANTING OPERATIONS.

4. THE LANDSCAPE CONTRACTOR IS TO RECEIVE THE SITE AT +/- 1/10TH OF AN INCH. THE LANDSCAPE CONTRACTOR SHALL OBTAIN A LETTER OF GRADE FROM THE GENERAL CONTRACTOR PRIOR TO BEGINNING WORK.

5. REFER TO SPECIFICATIONS FOR PLANTING REQUIREMENTS, MATERIALS, AND

. ALL TREES SHALL BE TAGGED BY THE PROJECT MANAGER AT A NURSERY SELECTED BY THE LANDSCAPE CONTRACTOR OR AT THE DISCRETION OF THE PROJECT

7. FINAL LOCATION OF A'LL PLANT MATERIAL SHALL BE SUBJECT TO APPROVAL OF THE PROJECT MANAGER PRIOR TO DIGGING ANY HOLES. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PROVIDING PROJECT MANAGER ADEQUATE ADVANCE NOTICE FOR ON-SITE APPROVALS. THE LANDSCAPE CONTRACTOR IS TO THE FOLLOWING BEFORE BEGINNING INSTALLING PLANTINGS:

SHRUBS - LAY OUT THE ACTUAL CONTAINERS ON-SITE BEFORE DIGGING HOLES.

TREES — STAKE THE LOCATIONS BEFORE DIGGING HOLES. ANY TREE PLANTED WITHOUT ITS FINAL LOCATION APPROVED BY THE PROJECT MANAGER MAY BE REQUESTED TO BE RELOCATED AT THE SOLE EXPENSE OF THE LANDSCAPE

8. THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER AT LEAST 48 HOURS IN ADVANCE PRIOR TO COMMENCEMENT OF WORK TO COORDINATE PROJECT OBSERVATION SCHEDULES:

9. IF CONFLICTS ARISE BETWEEN THE ACTUAL SIZE OF AREAS ON THE SITE AND THE DRAWINGS, CONTACT THE PROJECT MANAGER FOR RESOLUTION.

10. IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO FURNISH PLANTS FREE OF PESTS AND/OR DISEASES. PRE-SELECTED OR "PROJECT MANAGER TAGGED" PLANT MATERIAL MUST BE INSPECTED BY THE LANDSCAPE CONTRACTOR AND CERTIFIED PEST AND DISEASE FREE. IT IS THE LANDSCAPE CONTRACTOR'S OBLIGATION TO WARRANTY ALL PLANT MATERIAL PER THE SPECIFICATIONS

11. GROUNDCOVERS AND SHRUBS ARE TO BE TRIANGULARLY SPACED UNLESS INDICATED ON THE PLANS.

12. ALL TREES WITHIN A SPECIES SHALL HAVE MATCHING FORM, UNLESS OTHERWISE NOTED.

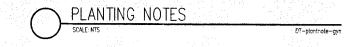
13. ALL TREES, SHRUB AND GROUNDCOVER AREAS (EXCLUDING TURF AND SLOPE AREAS) ARE TO BE MULCHED PER DETAILS

14. ALL MULCH TO BE SHREDDED HARDWOOD MULCH.

15. TREES SHALL BE SET BACK A MINIMUM OF TEN FEET (10') HORIZONTALLY FROM UTILITY STRUCTURES, INCLUDING, BUT NOT LIMITED TO, MANHOLES, VALVE VAULTS, VALVE BOXES, FIRE HYDRANTS, TRANSFORMERS AND SWITCH CANS. TREES SHALL BE SET BACK A MINIMUM OF FIVE (5') HORIZONTALLY FROM SANITARY SEWER AND WATER SERVICES. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS UNDER THE APPROVAL OF OWNER. REFER TO CIVIL DRAWINGS PREPARED BY OTHERS.

16. PLANTING RESTRICTIONS: PLANT DURING ONE OF THE FOLLOWING PERIORDS. COORDINATE PLANTING PERIODS WITH MAINTENANCE PERIODS TO PROVIDE REQUIRED MAINTENANCE FROM DATE OF SUBSTANTIAL COMPLETION.

1. SPRING PLANTING: 4/1 - 6/15 2. FALL PLANTING: 9/1 - 11/1





SEE PLANT LIST

FOR SPACING

SET ROOT MASS ABOVE FINISHED GRADE

PLANTING SOIL MIX

AND FERTILIZER,

EXCAVATE ENTIRE

MINIMUM DEPTH

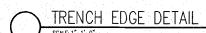
PLACE PLANTING

OF 4" &

" MIN. MULCH LAYER

FINISHED GRADE

SEE PLANS



DT-Is-trench-gyr

SEE PLANT LIST FOR SPACING AS SPEC'D. ET TOP OF ROOT MASS ABOVE FINISHED GRADE FINISHED GRADE SEE PLANS REMOVE BURLAF (AS NEEDED) FROM TOP 1/3 OF ROOT BALL AFTER PARTIAL BACKFILLING PLANTING SOIL MIX AND FERTILIZER AS SPECIFIED, 8" DEPTH.

ALL PLANTS TO BE INSTALLED IN STAGGERED ROWS UNLESS OTHERWISE NOTED ON PLANS

SHRUB PLANTING DETAIL

PLANT SPACING DETAIL

SHRUB SPACING

GOUNDCOVER & PERENNIAL SPACING

-SELECTIVELY REMOVE DAMAGED BRANCHES WHILE RETAINING NATURAL SHAPE OF TREE. (NEVER CUT LEADER, DO NOT LEAVE STUBS) ARBORTIE BY DEEPROOT SET TOP OF ROOT CROWN 4" ABOVE FINISHED GRADE _CUT ALL BINDINGS & REMOVE ALL WRAPPING FROM TOP 1/3 OF ALL WRAPPIN ROOT BALL. -3" MULCH LAYER AS SPECIFIED -6" HT. X 12" WATERING SAUCER AROUND PLANTING PIT. -1 X 2 STAKE DRIVEN BELOW GRADE TREE PLANTING FERTILIZER -EXCAVATED SOIL, AMENDED AS SPECIFIED

SHADE TREE PLANTING

DT-tree-w-wire-gyn

ARBORTIE BY DEEPROOT IN TRIPLICATE-TREE TRUNK SINGLE - TRUNKED TREE PLAN VIEW

GROUNDCOVER PLANTING

TREE GUYING DETAIL - SHADE TREE

REV. COMMENT DATE

CRYSTAL PINES PARKING LOT

TUTERA SENIOR

7611 STATE LINE RD.

Design Perspectives and

1280 Iroquois Avenue

Fax: (630) 428-3159

In Association With

Naperville, Illinois 60563

Telephone: (630) 428-3134

www.design-perspectives.net

Suite 110

Grounded in Creativity

KANSAS CITY, MO

ADDITION

LIVING

64114

SUITE 301

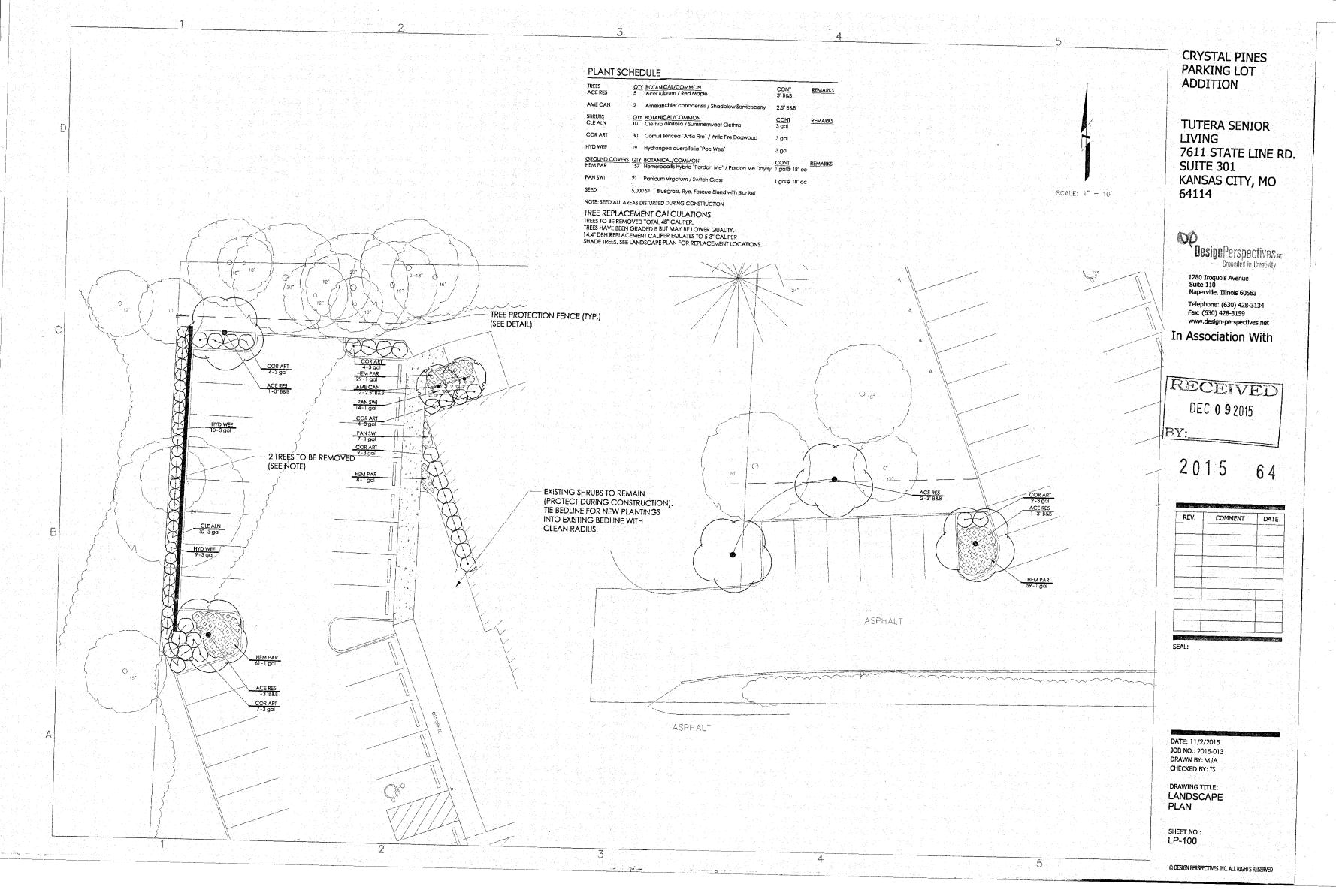
SEAL

DATE: 11/2/2015 JOB NO.: 2015-013 DRAWN BY: MJA CHECKED BY: TS

DRAWING TITLE: **LANDSCAPE DETAILS**

SHEET NO .: LP-500

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CRYSTAL PINES PARKING LOT ADDITION

335 N. ILLINOIS STREET CRYSTAL LAKE, ILLINOIS 60014

INDEX

- COVER SHEET
- **EXISTING CONDITIONS**
- GEOMETRIC PLAN
- GRADING, SOIL EROSION & UTILITY PLAN
- **SPECIFICATIONS**
- CRYSTAL LAKE NOTES AND SPECIFICATIONS
- 7. DETAILS

LOCATION MAP

BENCHMARKS

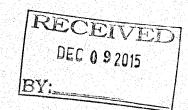
NORTHWEST CORNER OF MAIN STREET AND WOODSTOCK STREET, CRYSTAL LAKE, NGS (NATIONAL GEODETIC SURVEY) CONTROL MONUMENT DESIGNATION "CRYSTAL LAKE 2A" PID AJ2959.
DATUM POINT THROUGH 6" LOGO CAP.
ELEVATION 928.39 (NAVD 88)

NGS (NATIONAL GEODETIC SURVEY) CONTROL MONUMENT DESIGNATION MCH176 2A, PID-AJ2865, 200' EAST OF THE WEST ENTRANCE TO LIPPOLD PARK, SOUTH OF ILLINOIS ROUTE 176. DATUM POIN THROUGH 6" LOGO CAP ELEVATION 907.24 (NAVD 88

FINISH FLOOR AT WEST ENTRANCE OF BUILDING.

ELEVATION 908.23

2015 64



FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 800-892-0123

> **REVIEW SET** NOT FOR CONSTRUCTION

FLARED END SECTION WATER SERVICE LIGHT POLE LIGHT POLE (MAST ARM) POWER POLE HAND HOLE PEDESTAL CURB & GUTTER CONCRETE SIDEWALK OVERLAND FLOW DECIDUOUS TREE EVERGREEN SHRUB BUSHES \bigcirc

TELEPHONE LINE FENCE SILT FENCE FIRE HYDRANT VALVE IN VAULT VALVE AND BOX INLET CATCH BASIN MANHOLE WITH OPEN LID MANHOLE WITH CLOSED LID REVERSE PITCH CURB & GUTTER CALLOUT FOR SANITARY MANHOLE

OWNER/DEVELOPER:

7611 STATE LINE ROAD, SUITE 301

TUTERA SENIOR LIVING

KANSAS CITY, MO 64114

INTECH CONSULTANTS, INC. 1989 UNIVERSITY LANE, SUITE D

LISLE, ILLINOIS 60532-4500 PHONE NO.: 630-964-5656

PROPOSED

E-MAIL: seifert@intechconsultants.com

LEGEND

ILLINOIS REGISTRATION NUMBER 184-001040

SANITARY SEWER

UNDERGROUND ELECTRIC LINE OVERHEAD WIRES GAS LINE

CALLOUT FOR STORM STRUCTURE RIM SAME AS T.C. WHEN IN CURB

WATERMAIN STORM SEWER

ENGINEER:

CONSULTANTS, INC.

INTECH

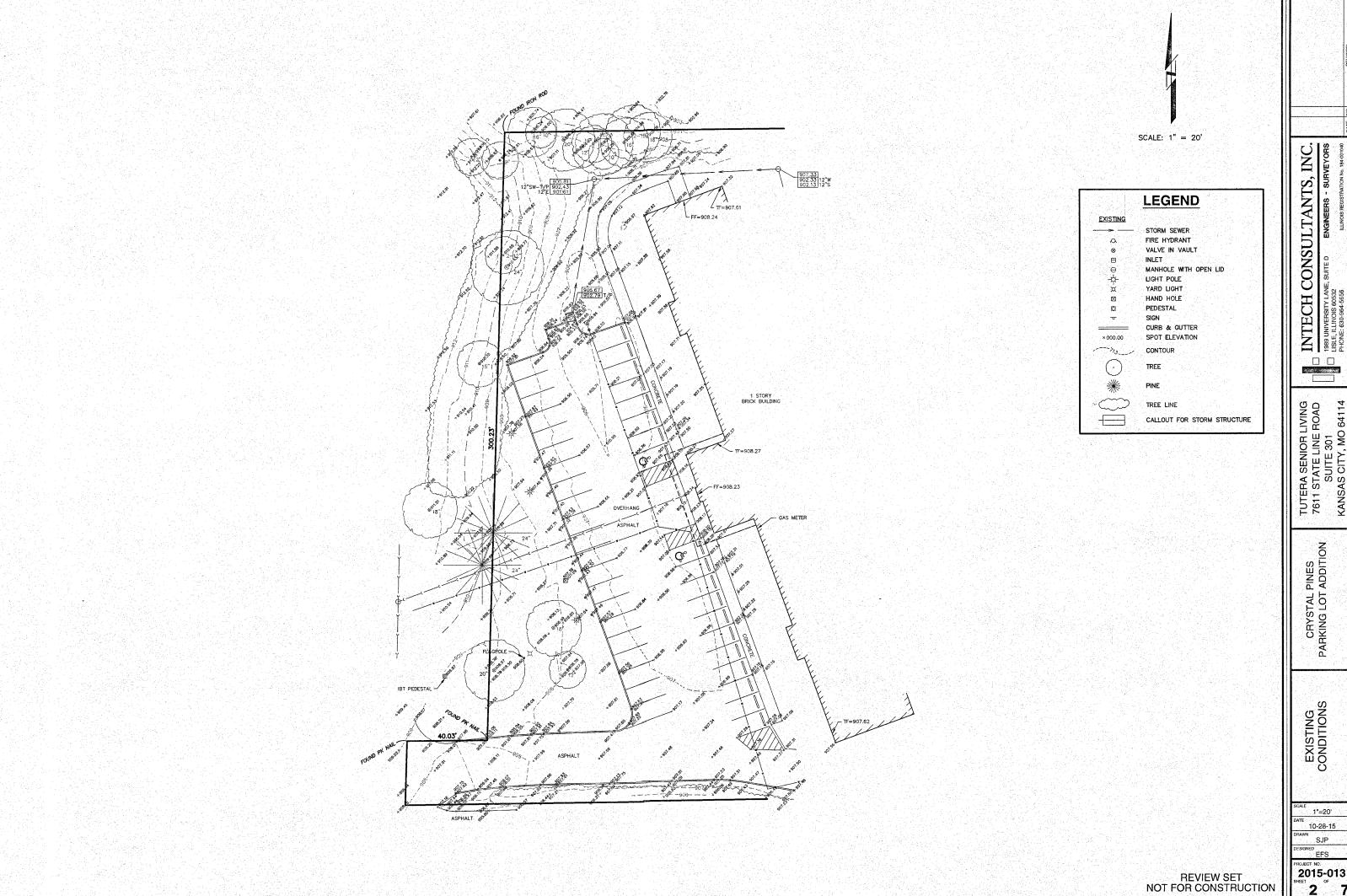
1989 UNIVERSITY LAN
LISLE, ILLINOIS 60532
PHONE: 630-964-5656

TUTERA SENIOR LIVING 7611 STATE LINE ROAD

CRYSTAL F PARKING LOT

NONE 10-28-15 SJP

2015-013



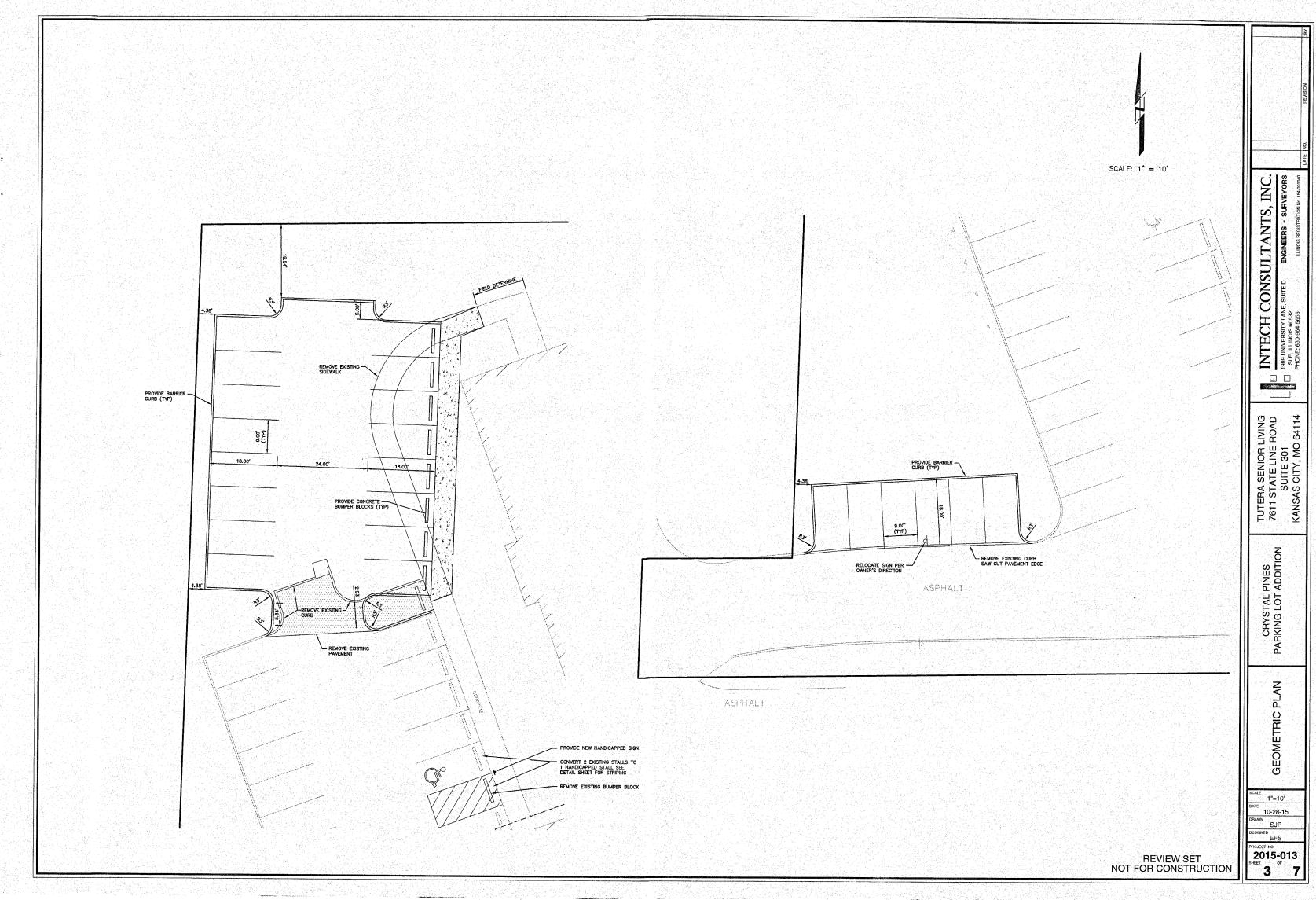
TUTERA SENIOR LIVING 7611 STATE LINE ROAD SUITE 301 KANSAS CITY, MO 64114

CRYSTAL PINES PARKING LOT ADDITION

1"=20' 10-28-15 SJP

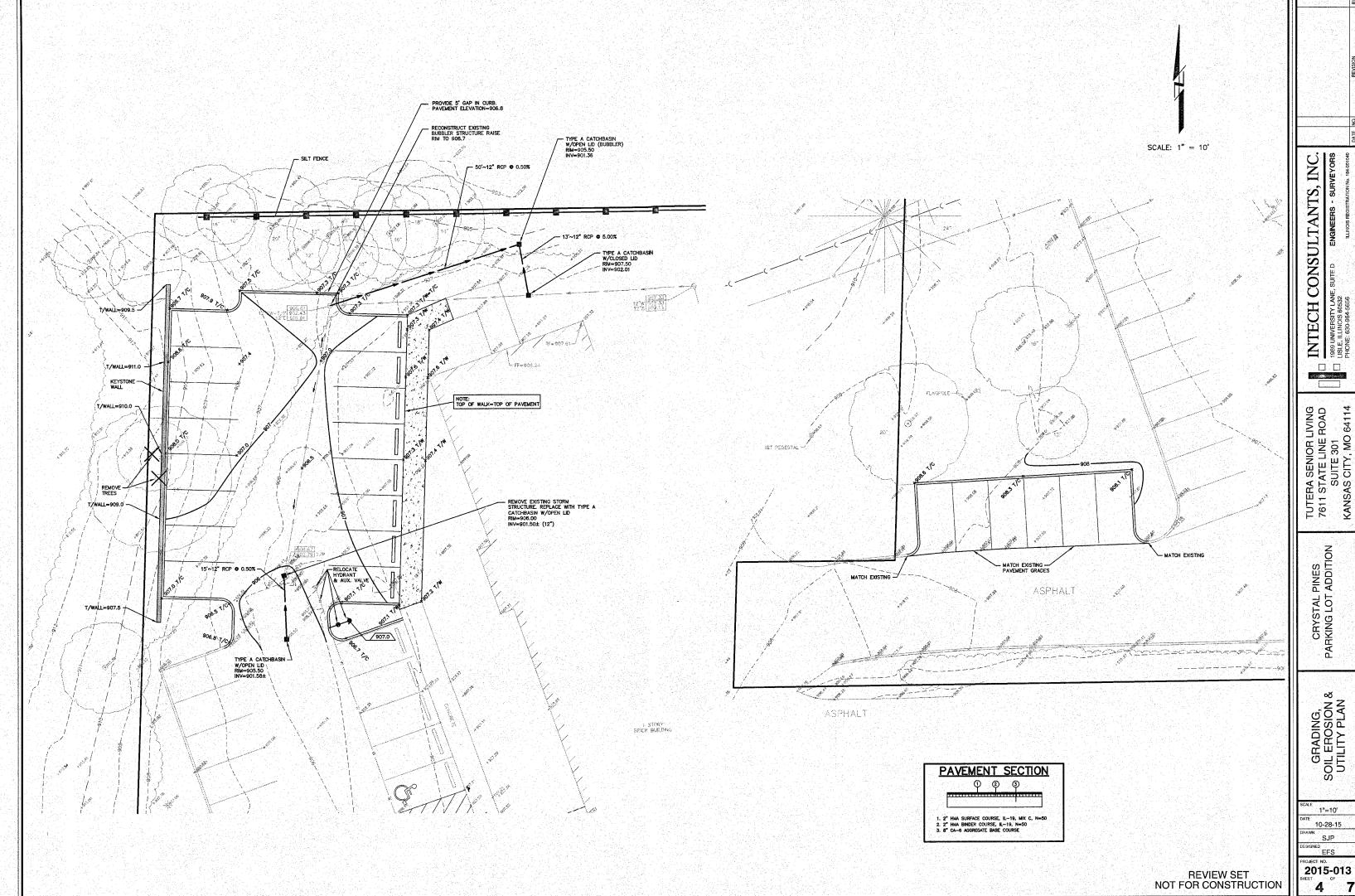
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Projects/2015/2015-013/dwg/2016-013 ENG.dwg, CEOM,



GRADING, SOIL EROSION & UTILITY PLAN

1"=10' 10-28-15 SJP

2015-013

4 7

- A. THE CONTRACTOR IS THE INDIVIDUAL, FIRM, PARTNERSHIP, OR CORPORATION CONTRACTING WITH THE OWNER FOR PERFORMANCE OF THE PRESCRIBED WORK.
- B. THE OWNER IS THE INDIVIDUAL, FIRM, PARTNERSHIP, OR CORPORATION HAVING THE AUTHORITY TO AWARD THE CONTRACT FOR THE PRESCRIBED WORK.
- C. THE ENGINEER WHERE SPECIFICALLY REFERRED TO IN THE SPECIAL PROVISIONS SHALL BE THE OWNER'S REPRESENTATIVE.
- 2. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR THE FOLLOWING, WHICH SHALL ALSO BE INCIDENTAL TO THE COST OF CONSTRUCTION:
- A EXAMINATION OF THE ENGINEERING PLANS AND SPECIFICATIONS AND THE EXISTING SITE CONDITIONS PRIOR TO SUBMITTING A BID, AND NOTIFYING THE ENGINEER AT ONCE OF ANY DISCREPANCIES.
- B. THE OBTAINING OF ANY NECESSARY PERMITS NOT PREVIOUSLY APPLIED FOR BY THE OWNER, AND POSTING OF THE NECESSARY BONDS.
- C. THE NOTIFICATION OF THE START OF CONSTRUCTION TO ALL JURISDICTIONAL AGENCIES, UTILITY COMPANIES, AND THE ENGINEER, AT LEAST TWO (2) WORKING DAYS PRIOR TO SAID START, ALL EXISTING UTILITIES MUST BE STAKED PRIOR TO CONSTRUCTION AND BE PROTECTED DURING CONSTRUCTION.
- D. CALLING ATTENTION TO THE OWNER OF ANY ERRORS OR DISCREPANCIES WHICH MAY BE SUSPECTED IN LINES AND GRADES WHICH ARE ESTABLISHED BY THE OWNER. THE CONTRACTOR SHALL PROPERLY PROCEED WITH THE WORK UNTIL THE LINES AND GRADES WHICH ARE BELLIEVED TO BE IN ERROR HAVE BEEN VERIFIED OR CORRECTED BY THE OWNER. ADDITIONAL STAKING THAT MAY BE REQUIRED DUE TO CONTRACTOR NEGLIGENCE SHALL BE PAID FOR BY THE CONTRACTOR.
- E. THE PROVIDING OF SAFE AND HEALTHFUL WORKING CONDITIONS THROUGHOUT THE PROSECUTION OF THE CONSTRUCTION WORK. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: THE REMOVAL OF DEBRIS, THE PROTECTING OF CONSTRUCTION HAZARDS WITH BARRICADES, AND THE KEEPING OF PUBLIC STREET PAVEMENTS CLEAN OF CONSTRUCTION DIRT AND DEBRIS.
- F. THE RESTORATION TO THE ORIGINAL CONDITION OR BETTER OF ANY OFFSITE AREAS THAT ARE DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION.
- G. THE TESTING OF MATERIALS, IF REQUIRED BY THE OWNER AND/OR THE JURISDICTIO
- H. THE GUARANTEE OF ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR UPON FINAL ACCEPTANCE BY THE OWNER AND THE JURISDICTIONAL AGENCIES.
- I. THE TRAFFIC CONTROL AND PROTECTION OF ALL WORK CONDUCTED WITHIN RUBLIC RIGHTS-CF-WAY, SHALL BE IN ACCORDANCE WITH THE APPLICABLE ATHICLES OF THE TATANDAPD SPECIFICATIONS FOR ROAD AND SRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2012, AND THE LATEST EDITION OF THE WARNAUL ON WINFORM TRAFFIC CONTROL DEVICES (MUTCO) AND "ILLINOIS SUPPLEMENT TO THE NATIONAL MARVALL OF UNFORM TRAFFIC CONTROL DEWGES.

3. THE OWNER SHALL BE RESPONSIBLE FOR THE FOLLOWING

- A. SCHEDULING THE NECESSARY PRE-CONSTRUCTION MEETING(S) WITH THE JURISDICTIONAL AGENCIES.
- B. PROVIDING THE CONTRACTOR WITH ONE (1) SET OF CONTROL LINE AND GRADE STAKES (AT OFFSETS MUTUALLY AGREED UPON) FOR THE PROPER PROSECUTION AND CONTROL OF THE WORK.
- A. TO PERIODICALLY VISIT THE CONSTRUCTION SITE IN ORDER TO BETTER CARRY OUT THE DUTIES AND RESPONSIBILITIES ASSIGNED BY THE OWNER AND UNDERTAKEN BY THE ENGINEER.
- B. THE ENGINEER SHALL NOT, DURING SUCH VISITS OR AS A RESULT OF SUCH OBSERVATIONS OF THE CONTRACTOR(9) WORK IN PROGRESS, SUPERVISE, DIRECT, OR HAVE CONTRACTOR(9) WORK, NOR SHALL THE ENGINEER HAVE AUTHORITY OVER OR RESPONSIBILITY FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF CONSTRUCTION SELECTED BY THE CONTRACTOR(S), FOR SAFETY PRECAUTIONS AND PROGRAMS INCIDENT TO THE WORK OF THE CONTRACTOR(S), OR FOR ANY FAILURE OF THE CONTRACTOR(S) TO COMPLY WITH LAWS RULES, HEADLY TO COMPLY WITH LAWS RULES, AND THE CONTRACTOR(S) OF COMPLY FAILURE OF THE CONTRACTOR ON NEITHER (SAFANTEE THE PROPERTY OF THE CONTRACTOR OF THE CONTRACTOR BY THE CONTRACTOR OF THE MORK OF THE CONTRACTOR OF THE CONTRACTOR OF THE MORK ON ACCORDANCE WITH THE CONTRACTOR OF THE CONTRACTOR OF THE MORK ON THE PROPRIET OF THE CONTRACTOR OF THE CONTRACTOR OF THE MORK ON THE PROPRIET OF THE CONTRACTOR OF THE CONTRACTOR OF THE MORK ON THE PROPRIET OF THE CONTRACTOR OF THE MORK ON ACCORDANCE WITH THE CONTRACTOR OF THE MORK OF

STANDARD SPECIFICATIONS

- THE STANDARD SPECIFICATIONS WHICH APPLY TO THE CONSTRUCTION WORK AS SHOWN ON THE ENGINEERING PLANS ARE CONTAINED IN THE FOLLOWING DOCUMENTS:
- A. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AS ADOPTED JANUARY 1, 2012 BY THE STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION.
- B. "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS' AS ADOPTED JULY 2009 BY THE ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS, ET AL.
- C. STANDARD SPECIFICATIONS AS CURRENTLY IN EFFECT BY THE LOCAL JURISDICTIONAL AGENCY.
- IN THE EVENT OF A CONFLICT BETWEEN STATEMENTS WHICH APPLY TO THE CONSTRUCTION WORK, THE STATEMENT CONTAINED WITHIN THE DOCUMENT FIRST ENUMERATED BELOW SHALL GOVERN:

- D. STANDARD SPECIFICATIONS, AS DEFINED IN PARAGRAPH 1 ABOVE

SPECIAL PROVISIONS

- 1. EARTHWORK IMPROVEMENTS
- EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS WITHIN THOSE AREAS THAT WILL REQUIRE PARTH EXCAVATION OR COMPACTED EARTH FILL MATERIAL, IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS.
- 2. PLACEMENT OF THE EXCAVATED MATERIAL IN OWNER DESIGNATED AREAS FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED, AND THOSE AREAS NOT REQUIRING STRUCTURAL FILL
- COMPACTION OF THE EXCAVATED MATERIAL WHERE PLACED IN AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL, SHALL BE MODERATE.
- 4. EXCESS MATERIALS, IF NOT UTILIZED AS FILL OR IF NOT STOCKPILED FOR FUTURE LANDSCAPING SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF BY THE

- EXCAVATION OF EARTH AND OTHER MATERIALS WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL. THE EXCAVATION SHALL BE TO WITHIN A TOLERANCE OF 0.3 FEET HEF PLAN SUBGRADE ELEVATIONS. THE 9.1 TOLERANCE WITHIN PAVEMENT AREAS SUCH THAT THE EARTH MATERIAL SHALL "BALANCE" AS PART OF THE FINE GRADING OFFER MAY.
- 2. PLACEMENT OF THE EARTH AND OTHER SUITABLE MATERIALS SHALL BE WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL IN ORDER TO ACHIEVE THE PLAN SUBGRADE GLEVATIONS OF WITHIN A TOLERANCE OF 6.1 FEET (a). THE FILL MATERIAL SHALL BE PLACED IN COSE ETS THAT SHALL NOT EXCEED BIGHT (b) WITHER FILL MATERIAL SHALL BE PLACED IN COSE SHALL PLACED WITHIN THE SHALL SHALL BE PLACED WITHIN THE SHALL SHALL BE PLACED WITHIN THOSE PORTIONS OF THE BUILDING SITE NOT RECUIRING STRUCTURAL FILL. TO WITHIN SX (c) INNOESS OF THE PLACED RESIDENCE BLEVATION. IN A PAREA RECUIRING STRUCTURAL FILL HOWEVER, THE EARTH MATERIAL SHALL NOT BE PLACED OVER TOPSOIL OR OTHER INSUITABLE MATERIALS UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.
- COMPACTION OF THE EARTH AND OTHER SUITABLE MATERIALS, SHALL BE TO AT LEAST 95% OF THE STANDARD PROCTOR DRY DENSITY, AST MESS WITHIN PROPOSED PAVEMENT AND BUILDING AREAS. MODERATE COMPACTION IS REQUIRED ELSEWHERE.
- 4. EXCESS MATERIALS, IF NOT UTILIZED AS FILL, SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF BY THE CONTRACTOR.

C. UNSUITABLE MATERIAL

UNSUITABLE MATERIAL SHALL BE CONSIDERED AS MATERIAL WHICH IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, THAT IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SAID MATERIAL, AND TO WHAT EXTENT, SHALL BE MADE BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

D. GENERAL

THE GRADING CONTRACTOR SHALL:

- MAINTAIN PROPER SITE DRAINAGE AT ALL TIMES DURING THE COURSE OF CONSTRUCTION, AND PREVENT STORM WATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS.
- SPREAD AND COMPACT UNIFORMLY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPOIL
 AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.
- SCARIFY AND COMPACT TO THE DEGREE SPECIFIED THE UPPER TWELVE (12) INCHES OF THE SUITABLE SUBGRADE MATERIAL, IN ALL AREAS THAT MAY BE SOFT DUE TO EXCESS MOISTURE CONTENT. THIS APPLIES TO CUT AREAS AS WELL AS PILL AREAS.
- PROVIDE WATER TO ADD TO DRY MATERIAL IN ORDER TO ADJUST THE MOISTURE CONTENT FOR THE PURPOSE OF ACHIEVING THE SPECIFIED COMPACTION.
- BE RESPONSIBLE FOR IMPLEMENTATION OF THE "SOIL EROSION AND SEDIMENTATION CONTROL MEASURES" AS ASSIGNED TO THE GRADING CONTRACTOR ON THE ENGINEERING PLAN.

- THE CONTRACTOR SHALL PROVIDE AS A MINIMUM, A FULLY LOADED SIX-WHEEL TRUCK FOR PROOF ROLLING THE PAVEMENT SUBGRADE PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND THE BASE MATERIAL.
- 2. SPECIFIC COMPACTION TESTING MAY BE REQUIRED BY THE OWNER IN SELECTED FILL AREAS THE CONTRACTOR SHALL BEAR THE COST OF ANY COMPACTION TESTING WHICH DOES NOT MET SPECIFICATION AS WELL AS THE RESPONSIBILITY AND COST FOR THE NECESSARY CORRECTION(S).
- APPROVAL OF THE PAVEMENT SUBGRADE BY THE OWNER SHALL BE REQUIRED PRIOR TO THE PLACEMENT OF THE PAVEMENT MATERIALS.

2. PAVING IMPROVEMENTS

PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL. THE STREETS SHALL BE FINE GRADED TO WITHIN 0.1 FEET \pm OF FINAL SUBGRIADE ELEVATION, TO A POINT TWO (2) FEET BEYOND THE BASC OF THE PROPOSED CURB.

- 1. THE CURB AND GUTTER SHALL BE THE TYPE AS DETAILED ON THE ENGINEERING PLANS.
- 2. THE CURBS SHALL BE BACKFILLED AFTER THEIR CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE.

- THE PAVEMENT MATERIALS SHALL BE AS DETAILED ON THE ENGINEERING PLANS. THICKNESSES SPECIFIED SHALL BE CONSIDERED TO BE THE MINIMUM COMPACTED THICKNESS.
- 2. BITUMINOUS MATERIALS (PRIME COAT) SHALL BE APPLIED TO THE SURFACE OF THE BASE COURSE AND THE SURFACE OF THE BINDER COURSE PRIOR TO THE PAVING OPERATIONS.T WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 463.99 OF THE STANDARD SPECIFICATIONS. THE BASE COURSE AND BINDER COURSE SHALL BE DRY AND FREE FROM ANY DUST PRIOR TO APPLYING THE PRIME COAT OF BITUMINOUS MATERIAL. THE COST OF SURFACE PREPARATION SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM OF WORK. THE APPLICATION RATE SHALL BE 0.25 GAL/S.Y.

THE PAVING CONTRACTOR SHALL:

- REPAIR ANY BASE COURSE AND BINDER COURSE FAILURES PRIOR TO THE INSTALLATION OF THE FINAL BITUMINOUS CONCRETE SURFACE COURSE.
- 2 SWEEP CLEAN THE BINDER COURSE PRIOR TO THE INSTALLATION OF THE FINAL BITUMINOUS CONCRETE SURFACE COURSE. EXCESSIVE CLEANING OF THE BINDER COURSE THAT MAY BE REQUIRED, AND IS NOT THE FAULT OF THE PAVING CONTRACTOR, SHALL BE PAID FOR ON A TIME AND MATERIAL BASIS BY PRIOR AGREEMENT WITH THE OWNER.

- PRIOR TO PLACEMENT OF THE BASE COURSE, THE SUBGRADE MUST BE APPROVED BY THE LOCAL JURISDICTIONAL AUTHORITY. (SEE "TESTING AND FINAL ACCEPTANCE FOR EARTHWORK".)
- PRIOR TO PLACEMENT OF THE HOT MIX ASPHALT SURFACE COURSE, THE CONTRACTOR IF
 REQUESTED BY THE OWNER. SHALL OBTAIN SPECIMENS OF THE BINDER COURSE WITH A CORE
 DRILL WHERE DIRECTED BY THE ENGINEER, FOR THE PURPOSE OF THEOMES'S VERHICATION.
 CORING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STANDARD
 SPECIHCATION ENTITLED STANDARD SPECIHCATIONS FOR ROAD AND BRIDGE SPECIFICATION ENTITIED "STANDARD SPECIFICATIONS FOR TAXON AND BRIDGE CONSTRUCTION". THE COST FOR OBTAINING CORES, WHICH ARE LESS THAN THE MINIMUM THICKNESS SPECIFIED, SHALL BE BORNE BY THE CONTRACTOR. THE COST FOR OBTAINING CORES WHICH MEET OF EXCEED THE SPECIFICATION SHALL BE COVERED BY THE WOWER.
- DEFICIENCIES IN THE HOT MIX ASPHALT BINDER COURSE SHALL BE ADJUSTED FOR BY INCREASING THE PLAN THICKNESS OF THE SURFACE COURSE WITH NO ADDITIONAL COST TO THE OWNER.
- FINAL ACCEPTANCE OF THE TOTAL PAVEMENT INSTALLATION SHALL BE SUBJECT TO THE TESTING AND CHECKING REQUIREMENTS CITED ABOVE.

3. UNDERGROUND IMPROVEMENTS

A. WATER MAIN AND SERVICES

MATERIAL FOR THE WATER MAIN SHALL BE DUCTILE IRON PIPE, WHICH SHALL MEET OR EXCEED THE PERFORMANCE REQUIREMENTS OF ANSIAWWA 0151/A21.6-02 (OR LATEST EDITION), CLASS 92 MINIMUM THICKNESS DESIGNATION. WATER SERVICE MATERIAL SHALL BE TYPE "X COPPER.

- 2. JOINTS FOR THE DUCTILE IRON PIPE SHALL BE THE PUSH-ON (BELL-TITE) TYPE, AWWA 0600-99 (OR LATEST EDITION).
- 3. COVER OVER THE PIPE SHALL BE AS INDICATED ON THE ENGINEERING PLANS.
- 4. POLYETHYLENE ENCASEMENT, CONFORMING TO AWWA C-105-82 SHALL BE PROVIDED FOR ALL DUCTILE IRON PIPE PLACED IN CORROSIVE SOILS, AS DETERMINED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- 5. SIZES SHALL BE AS INDICATED ON THE ENGINEERING PLAN

B. STORM SEWER

- 1. MATERIAL SHALL BE:
- A. REINFORCED CONCRETÉ PIPE (RCP), WHICH SHALL MEET OR EXCEED THE PERFORMANCE REQUIREMENTS OF ASTM C-76, CLASS AS INDICATED ON THE ENGINEERING PLANS.

- A. FOR RCP, BELL AND SPIGOT TYPE WITH BITUMINOUS MASTIC OR ASTM C 361 GASKETED JOINTS WHERE INDICATED ON THE ENGINEERING PLAN.
- 3. BEDDING SHALL BE AS DETAILED ON THE ENGINEERING PLAN.
- 4. SIZE SHALL BE AS INDICATED ON THE ENGINEERING PLAN.

C. TRENCH BACKFILL MATERIAL

- 1. TRENCH BACKFILL MATERIAL SHALL CONSIST OF CA-6 AGGREGATE
- 2. ALL TRENCHES UNDER OR WITHIN 2' OF AN EXISTING OR PROPOSED CURB AND/OR PAVEMENT ARE TO BE BACKFILLED WITH TRENCH BACKFILL MATERIAL.

THE UNDERGROUND CONTRACTOR SHALL:

- ADHERE TO THE CRITERIA FOR THE SEPARATION BETWEEN WATER MAINS AND THE STORM AND PUBLICARY STATEMENTS*, DIVISION OF PUBLICARY STATEMENTS*, DIVISION OF PUBLIC WATER SUPPLIES, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (SEE STANDARD
- BE RESPONSIBLE TO PLACE ON GRADE, AND COORDINATE WITH OTHER CONTRACTORS, ALL UNDERGROUND UTILITY STRUCTURE FRAMES SUCH AS MANHOLES, CATCH BASINS, AND INLETS.
- 3. BE AWARE OF POTENTIAL CONFLICTS WITH EXISTING UTILITIES. THE CONTRACTOR SHALL EXCAVATE AROUND THE EXISTING UTILITIES TO DETERMINE THEIR EXACT LOCATION AND ELEVATION PRIOR TO THE CONSTRUCTION OF THE PROPOSED UTILITY IMPROVEMENTS.
- PROVIDE POURED CONCRETE FILLETS CONFORMING TO THE SHAPE OF THE PIPE IN ALL SANITARY AND STORM MANHOLES, AND INLETS.
- 5. BE RESPONSIBLE FOR MAINTAINING THE TOP OF ANY UTILITY TRENCH AT LEAST TWO (2) FEET AWAY FROM ANY EXISTING OR PROPOSED CURB OR PAVEMENT, IN THOSE INSTANCES WHERE THE TRENCH RUNS PARALLEL TO SAID CURB OR PAVEMENT.
- BE RESPONSIBLE FOR THE DEWATERING OF UTILITY TRENCHES DURING CONSTRUCTION AND PROVIDING THE NECESSARY TRENCH BRACING THAT MAY BE REQUIRED TO ASSURE SAFE WORKING CONDITIONS.
- REMOVE SOFT MATERIALS THAT MAY BE ENCOUNTERED AT THE PIPE INVERTIELEVATION TO A DEPTH OF AT LEAST ONE, (1) FT. BELOW THE BOTTOM OF THE PIPE, AND BACKFILL WITH COMPACTED BEDDING MATERIAL.
- 8. NOT DAMAGE THE ROAD SUBGRADE WITH EXCESSIVE WATER SATURATION FROM HYDRANT FLUSHING, OR FROM LEAKS IN THE WATER DISTRIBUTION SYSTEM. THE COST OF REPAIR FOR SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. HOSES SHOULD BE USED TO DIRECT THE WATER FROM HYDRANT FLUSHING INTO THE STORM SEWER SYSTEM (IF AVAILABLE). REPAIR ANY EXISTING FIELD DRAINAGE TILE DAMAGED DURING CONSTRUCTION, AND PROPERLY
 REPOUTE AND/OR CONNECT SAID TILE TO THE NEAREST STORM SEWER OUTLET. ALL LOCATIONS OF
 ENCOUNTERED FIELD DRAINAGE TILE SHALL BE PROPERLY INDICATED ON THE CONTRACTOR'S
 RECORD ORAWING.
- 10. BE RESPONSIBLE FOR IMPLEMENTATION OF THE 'SOIL EROSION AND SEDIMENTATION CONTROL MEASURES' AS APPLICABLE.

E. TESTING AND FINAL ACCEPTANCE

- STORM SEWER AND ALL STORM STRUCTURES SHALL BE CLEAN AND FREE OF DEBRIS PRIOR TO THEIR FINAL ACCEPTANCE.
- 2. WATER MAIN SHALL BE TESTED IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL REQUIREMENTS PRIOR TO ITS INALL ACCEPTANCE. THE PRESSURE AND LEAKAGE TESTS AND DISINFECTION OF THE MAINS SHALL BE AS DESCRIBED IN THE "STANDARD SPECIFICATIONS" UNLESS THE LOCAL REQUIREMENTS ARE MORE RESTRICTIVE. ALL VALVE VAULTS SHALL BE CLEAN AND FREE OF DEBRIS AND WATER, AND INDIVIDUAL SERVICE BOXES SHALL BE VISIBLE AND CLEARLY LOCATED PRIOR TO THEIR FINAL ACCEPTANCE.

- 6. ALL EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND AFTER EACH 1/2" RAIN EVENT
- 7. IN AREAS WHERE WORK IS COMPLETE, PERMANENT STABILIZATION SHALL OCCUR WITHIN 7 DAYS OF COMPLETION, AND IN AREAS WHERE WORK I AS TEMPORARIUS CEASED FOR 14 DAYS OR MORE, TEMPORARY STABILIZATION SHALL OCCUR BY THE 7TH DAY AFTER WORK HAS CEASED.
- 8. THE CONDITION OF THE CONSTRUCTION SITE FOR WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT SLOPES AND OTHER BARIE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL. ALL OPEN AREAS THAT ARE TO REMAIN IDLE THROUGHOUT THE WINTER SHALL RECEIVE TEMPORARY PROSION CONTROL MEASURES INCLUDING TEMPORARY SEDIMG, MULCHING AND/OR EROSION CONTROL. BLANKET PRIOR TO THE END OF THE ROAL GROWING SEASON. THE AREAS TO BE WORKED BEYOND THE END OF THE GROWING SEASON. THE AREAS TO BE HOSVICES THAT DO NOT RELY ON VEGETATIVE COVER SUCH AS EROSION CONTROL BLANKET AND HEAVY WILCHING.

- 11. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

SOIL EROSION AND SEDIMENTATION CONTROL SPECIFICATIONS

1. ALL WORK SHALL BE DONE IN GENERAL ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS FOR SOIL EROSION AND SEDIMENTATION CONTROL FOR THE CITY OF CRYSTAL LAKE.

2. WHERE DESIGNATED ON THE PLAN, A SILT CONTROL FENCE SHALL BE CONSTRUCTED AS DETAILED ON THE ENGINEERING PLAN.

A. CONSTRUCT THE APPLICABLE PORTIONS OF THE EROSION AND SEDIMENTATION CONTROLS PRIOR TO SITE CLEARING.

PHICH TO SITE CLEANING.

B. CONTROL SITE DEVELOPMENT IN ACCORDANCE WITH THE SPECIFICATIONS.

C. MAINTAIN CONSTRUCTION TRAFFIC SURFACES, CLEANING OF STORM STRUCTURES, AND THE LIKE ON A REGULAR BASIS AFTER EACH HEAVY PAIN OR AS OTHERWISE REQUIRED.

DURING THE COURSE OF CONSTRUCTION, THE CITY RESERVES THE RIGHT TO REQUEST AND OBTAIN WITHIN REASON, ADDITIONAL EROSION AND SEDIMENTATION CONTROLS TO PROTECT THE PUBLIC HEALTH, SAFTY AND WELFARE.

THE ESTIMATED CONSTRUCTION SCHEDULE IS AS FOLLOWS.
TOPSOIL STRIPPING
ROUGH GRADING AND CONST.
SPRING 2016
FINAL GRADING
FINAL MADGCAPING
SPRING 2016

STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN THREE (8)
DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (LE PERIMETER SILT
FENCE). STOCKPILES TO REMAIN IN PLACE FOR 30 DAYS OR MORE SHALL RECEIVE TEMPORARY
SEEDING.

10. UMLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SECIFICATIONS IN THE LILINOIS URBAN MANUAL REVISE FERRUARY 2002.

12. IT IS THE RESPONSIBILITY OF THE LANDOWNER AND/OR GENERAL CONTRACTOR TO INFORM ANY SUB-CONTRACTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT, OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL. PLANS AND THE NATIONAL POLLUTANTS DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS SET FORTH BY THE ILLINOIS EPA.

REVIEW SET NOT FOR CONSTRUCTION SJP EFS

INC.

CONSULTANTS,

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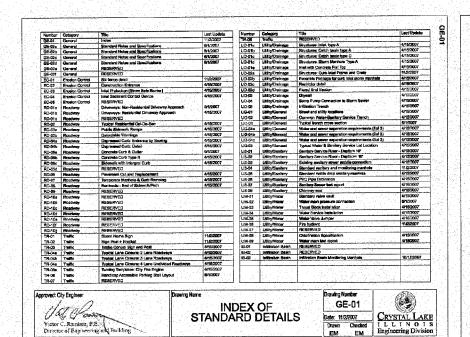
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SANITARY SEWER: Non-sheer staintness about occupatings shall be used when connecting sewer pipes of dissimiler materials and pipes with no halls joints. When connecting to an axisting sanilary sewer by me^{or a} other than an existing why or manthole, contractor shall use it Shower-Tap and hub-way or Right-100 waster. Unless an alternate method is approved, water stop gaskets shall be provided at all sanitary
sever manhole connections. Type and manufacturer to be approved by the City.

PVC plastic sewer pipe and fittings of stress 4-inch through 15-inch shall conform to the latest revised specification requirements of ASTM 03034 for type PSM polyvingl chloride (PVC) series pipe and fittings of minimum wall biobiness SOR 35.

Joints shall be either the solvent weld type conforming to the latest revised speci-requirements of ASTM D2584 and ASTM D2865, or elastomaric gester type con-revised specification requirements of ASTM D1889 and ASTM D3212.

A thicker walled pipe such as SDR 28 may be specified by the engineer depending on design ander field conditions.

PVC plastic sever ripe and filtings of lates 18-high through 36-high shall conform to the lates revised opcollation requirement of ASTM PSFG or polyrety distribution (PVC) any distinued ribble organity-leaver pion and filtings, with impairs, the gesteroing pina and elaboratoric peakes to them a wherefulf in each conforming to the latest revised opcorfication requirements of ASTM PSFG or ASTM DSCG.

Pipe and fittings shall be the producte of one approved manufacturer only, and there shall not be any mixing of pipe and fittings of different manufacturers.

The handling and installation of pipe, assembly or joints, and manhola connections shall be in accordance with the manufacturer is recommendations.

10. PVC clos shall be indicised in accordance with the latest evided opecification requirements of ARTH DB351 using other compacts does for close I granular environment records for adding, learning up and leat beddled 12 learns over the top of pipe provide the recording support for the pipe as that the maximum disflection does not excised the persons (SNs) of the hybors original Darrant Clameter.

11. The Contractor shall provide the accessary tools and couplanters and pations the work necessary to led the defendion in the I tills 1,200 feet of installated sever and not less than the provent (Fig. 9) in the sever that defending the sever that defending except the sever that defending except the sever that defending except the sever that the defending except the sever that the sever that defending the sever that the sever t

2. The Contractor shall subject all sentrary sewors, including service lines, to an shiftest. Allowable inflination shall not second 100 gallons per inch demoter of pipe per mile per day. Televing of testing, cost for laterising, and testing shall be the responsibility of the Contractor.

Cast Iron Suit Pipe: service weight cast from soil pipe and fittings conforming C.I.S.P.I. Specification HS-57 with compression type nuiber gester jefnts conforming to ASTM epecification C564, or other suitable materials approved by the City Engineer.

GE-02c Date: 04/2007

Drawn Checked

EM LZ

CRYSTAL LAKE
1 L t N O 1 8
Engineering Division

GENERAL SITE-WORK

- Pro-Construction ministing shall be conducted with City Staff and all Contractors prior to commencing any grading or underground utility construction artifates (schedule meeting with the Engineering Division Inspection Services Coordinator at \$15.386.3615).
- 2. 24 hour Emergency contact numbers shall be provided to City Staff at the Pre-Construction meeting
- Working hours shall be limited to the hours of 7300 a.m. and 7300 p.m. on venicity's city (social) in cases of emergency). Non-emergency work on weekends or holdays is not permitted per City Code except under a social as permit from the City Engineer, limited to a period of not more than three clays and remarkation only once.
- Publishprivate streams shall be kept free of cirl and debrits with regular dearing, sweeping, and ecoping conducted by the Contractor. Junk and debrits shall not be allowed to accurately, blow, or scaller onto streets or adjacent properties.
- 5. LULLE shall be contected for utility locations on site and in the edjacent rights of way
- Contractor shall provide and maintain fencing, barricades, inaffic control signs, and other subgrounding measures during the course of all work to protect the public from the constructor operations.
- Weinfain access to adjacent streets during construction. No closing of streets unless approved first obtained from the agency with jurisdiction (City Engineering Division, McLiverry County Department of Transportation, Illinois Department of Transportation, std).
- Any damage to public right-of-way, public utilities, streets, curb, etc. shall be repaired/replaced as soon as possible and as directed by the Engineering Division.
- The contractor shall give the City of Cynetic Late. Blinds Department of Temporission, and any other governmental against heir griediction, at least are 0.3 working adaps incloss according seturday and sharley prior to the inflation of any phase of construction. Contractor shall inneedshally mostly if construction has passed and enrive the iso (2) working day notification themselve.
- 10. The Contractor shall be responsible for obtaining all expured points for construction along or scrose existing stress or highways. The Contractor shall make arrangements for the proper bracking sharing an of other protection of all contracts of ericles construction begins.
- The owner is responsible for the cost of overtime inspection beyond the normal eight (8) hour de including weekends and holidays.

- The grading and construction of the site improvements shall not cause purpling of storm sever water. At areas adjacent to these improvements shall be graded to allow positive drainage.
- The proposed grading elevations shown on the plane are finished grade. A minimum of six (6) inches of topsoil is to be placed before finished grade elevations are activities.
- All subgrade material shaft have a misimum CBR (California Bearing Ratio) of 3.0 so determined by the soils eogineer, or bear replacement and previously design existing shall be provided which are adoquate to obtain equivalent parameter.
- Proposed peverient areas, building pads, driveways and sidewalks and yardiopal space areas shall be exceivated or filled to plus or minus 0.1 foot of design subgrade elevations by the Contractor.
- Any barrow pit locations shall be identified by the Contractor on a copy of the approved she plans and towarded to the Englasering Division at least 24-house prior to exceeding. Provide backful compaction reports from a g
- Backfill shall be monitored by a geotechnical engineer on-site with compaction reports forwarded to the Engineering Division for review.

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Approved: City Engineer	Drawing Name	Drawing Number
1/20	STANDARD NOTES	GE-02a
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Director of Engineering and Building		EM LZ Engin
EVENKYON REPLING AND BUILDING MERCHING CHETALLS AND STANDARDS	医乳腺性溶液 医动物性坏疽 医皮肤性神经病 化二基二烯基化	

TOPSOIL STOCKPILING:

- Location of any on-affe lopeof stockpiles shall be identified on the approved plans with afit fonce installed around the perimeter of the stockpile.
- Topsoil shall be stodiplied in sequence to eliminate any re-handling or double movement by the Contractor. Failure to properly sequence the stockolling operations shall not constitute a claim for edifferior compensation. No material shall be stockylled in front yearls, in attify personners, or in the right-of-way times.
- If a stockpile is to remain in place for more than twelve (12) months, it is required that
 the stockpile be seeded so as to minimize soil erosion by both wind and water.

UNDERGROUND UTILITY:

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Victor C. Raminez, P.E. Dianetto of Engineering and Eu

- The Conteactor shall coordinate water main, water service, serifary and storm sewer isspections and testing with the City Engineering and Building Department at least 24 hours in advance.
- 3. All manhole or visive covers shall be imprinted OSANITARYO or OSTORIAD or OWATERO Reference the letest edition of the EStandard Specifications for Water and Sewer Main Construction in Illinoist.
- 5. Existing manholes to be circular cored and booted

STANDARD NOTES AND SPECIFICATIONS

- All specified excelors control measures shall be initialled and maintained our title requirements of the Crystal Lake Stormwater Ordinance in accordance with the active NPDES parmit.
- 2. All slopes 4:1 or steeper shall be sockled or blanketed immediately after mass earthwork
- 3. All overlend flow noutes to be stabilized by sad or blanket.
- Erosion control measures to be inspected and approved by City Engineering Division prior to additional work on size.
- Continuous monitoring of erosion control measures is required. Maintain records of weekly reports per the City of Crystal Lake Stormwater Ordinance.
- 7. All stierns sower catch basins, sumps end/or retention basins provided with this project are to be steered at the end of constitution of the project plot to the advantageous. Cleaning may also be regarded ching the course of the construction of the project if it is determined that the AT and duting stope are not properly functioning and their performances be imparted.

GE-02b

Thrust blocking shall be installed on water mains at all bends, tees, elbows, etc. except as noted ballow.

Approved: City Engineer

Vieter C. Ramirez, P.E. Dissector of Kinginesering and Building

- Thrust blocks not permitted with 45" vertical bends in water main t. these shall be restrained with IMeco-Luci or equivalent.
- Water main shall be ductile iron pipe, Class 52 conforming to A.N.S.I. A-21.51 or AWWA C-161
- Gastalis and cast Iron fittings shall conform to A.N.S.I. A-21.11 or AWWA C-110 and C-111
 water main shall be certent fixed in conformance with A.N.S.I. A-21.4 or AWWA C-104.
- Minimum cover from finished grade to top of water main shall be six (6) fast, Maximum cover shall be start (8) fast.
- 6. Weter Main Tepec an Ulimbia licensed plumber is required for any water main tap.

PRESSURE TEST

TOTAL ALLOWARE LEAKAGE IN ONE HOUR (GALLONS)

TOTAL ALLOWASILE LEAKAGE IN TIME FRAME (GALLONS)

STANDARD NOTES AND SPECIFICATIONS

- Subgrade and proposed pavements shall be finished by the Excar 0.1 foot plus or minus, of plan elevation.
- 3. The Pening Contractor shall ensure that the subgrade real term properly propered and that the finished top of subgrade elevation has been graded within the televances allowed in these specifications. Linkes the Pening Contractor actives the owner can draginour in writing prior to the grading lar base course constructor. It is underfaced that the Contractor that the subgrade.
- For the purpose of providing bandcap accessibility and complying with the American Disability Act and City Standards, curbs shall be depressed at locations where public walks or pedestrian paths intersed outs lines at street intersections and other location
- 5. ½ Inch thick presoution fibre expansion joints with two (2) No. 4 piain round steel close has shall be installed at designated intervals and at air P.O., P.T., cuth intures and at the end of each pour. Alternate and of the dowel bers shall be greated and titled with metal argambion tables.
- 8. "A inch thick fibre expension joints shall be used in every case where the stidewell coincides with the cast and guilder. Contraction joints shall be saw out at designated intervals in the curb. The cost of these joints shall be sonsidered as incidentel to the cost of the contract.
- All poured in place concrete ourb and gutter shall incorporate two (2) No. 4 reinforcing bars installed wherever the ourb and gutter crosses utility service knes, the cost of which shall be considered incidental to the cost of concrete ourb and gutter.
- 8. Stieuelles (witers required) shall be of the thickness and dimensions as shown in the constantion claims. All delevant concrete shall be a minimum of 6.1 teg mix (critical roles of 3 constant) and shall develop a minimum of 3.00 to compression enterplied their sight, (35 days. Centreating joints shall be set in turn (4) foct comises, and one-hall sight (51 chi) promotion filter sequenciated filter sequenciated filter sequenciated filter sequenciated shall be contained and where the states where the custom contract advantage of the sect of each pour. All addisseads constituted over facility involves as existed secting of viewsy approx shall be reinforced with three (3) No. 4 reinforcing bars (10 foct minimum length).





CALCULATION FOR ACTUAL WATER VOLUME LOSS

SUPPLY VESSEL (FEET)

ACTUAL DROP IN WATER LEVEL (FEET)

INITIAL METER READING

TOTAL ALLOWABLE LEAKAGE (GALLONS)

PASS OR FAIL

NOTES:

GALLONS



LINE TESTED OFFE

STANDARD NOTES AND SPECIFICATIONS

2-HOUR 24-HOUR

INDICATE





2-HOUR 24-HOUR

CITY OF CRYSTAL LAKE WATER MAIN CHLORINATION SPECIFICATIONS:

- DISINFECTION OF WATER MAINS SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION, CURRENT EDITION
- THE CITY ENGINEERING DIVISION AND WATER DIVISION SHALL BE NOTIFIED 48 HOURS IN ADI
- 3. ONLY CITY WATER DIVISION PERSONNEL MAY OPERATE WATER VALVES ON LIVE MAINS A WATER VALVE JUMPER IS REQUIRED TO MAINTAIN PRESSURE ON THE CHLORINATED LINES DURING THE SAMPLING PROCEDURE FOR PROPER INSTALLATION AND REQUIREMENTS SEE THE STANDARD WATER VALVE JUMPER DETAILS.
- WATER MAINS SHALL BE FLUSHED WITH A MINIMUM VELOCITY OF 2.5 FPS. 6. THE INITIAL CHLORINE CONCENTRATION SHALL BE 50 mg/L WITH A MININUM 24 HOUR RESIDUAL OF 25 mg/L
- ALL NEW VALVES AND HYDRANTS SHALL BE OPERATED WHILE LINE IS BEING CHLORNATED.
- THE CITY ENGINEERING DIVISION SHALL DETERMINE LOCATION AND QUANTITY OF CORPORATION STOPS FOR FLUSHING AND CHLORINATING.
- D. THE FINAL FLUSHING RESIDUAL IN THE NEW CHLORINATED LINES SHALL BE BETWEEN 0.2 AND 2.9 mg/L
- ALL WATER SAMPLES SHALL BE COLLECTED ON TWO (7) CONSECUTIVE DAYS AND PASS BACTEROLOGICAL TEST RESULTS. IN THE EVENT THAT THE PIERS TEST CAMPLES THAN THE SAMPLES THAN THE SAMPLES THAN THE SAMPLES THAN THE SAMPLES THAN SET OF SAMPLES WAS BEFORE THE SAMPLES THAN SET OF SAMPLES THAN SET OF SAMPLES THAN THE PROCEDURE BUTS THE SECOND SET THAN TO PASS TESTAND, THEN THE PROCEDURE BUTS THE SECOND SET THAN TO PASS TESTAND, THEN THE PROCEDURE BUTS THE SECOND SET THAN TO PASS TESTAND, THEN THE SAMPLES THE SAMPLES THE SAMPLES THAN THE MAIN SENING RECKLORIMATED, REFUSINGED, AND SAMPLES.

12. STATE CERTIFIED LAB MUST BE USED FOR SAMPLES.

NUMBER OF 5-GRAIN HYPOCHLORITE TABLETS REQUIRED FOR A DOSAGE OF 50mpL PER LENGTH OF PIPE SECTION JP TO 13 18 20 30 43

CHLORINE REQUIREMENTS TO PRODUCE 50 mg/L CONCENTRATION IN 100 FEET OF PIPE-BY DIAMETER

| PIDE STATE | 10.000 | 12. OF LOWN | SOLUTION | SOLUTION | SALUTION | Saluti

0.243

Approved: City Engineer
1 3 7 3 30 3 3 3 3 3 3 3
118774
D. A. C. Carrier
Victor C. Ramires, P.E.
Director of Engineering and Building

CHLORINATION SPECIFICATIONS



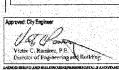


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Drawn Checked I L L I N O I S Engineering Division







WATER MAIN TEST REPORT

UW-09



REVIEW SET NOT FOR CONSTRUCTION CRYSTAL LAKE
NOTES AND
SPECIFICATIONS

NONE 10-28-15 SJP

INC.

CONSULTANTS,

INTECH

TUTERA SENIOR LI 7611 STATE LINE R SUITE 301 KANSAS CITY, MO 6

PINES - ADDITION

TAL

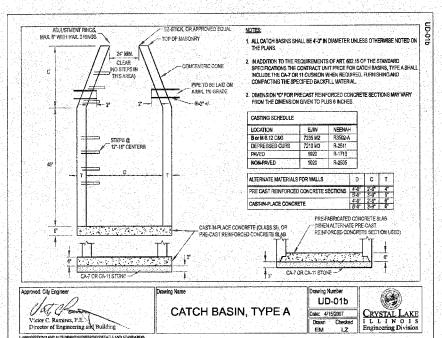
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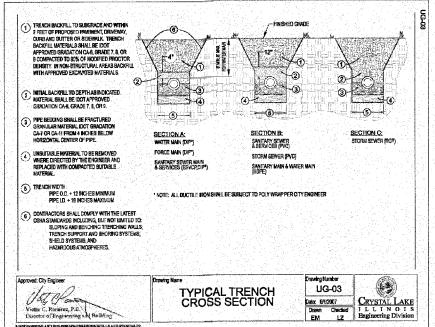
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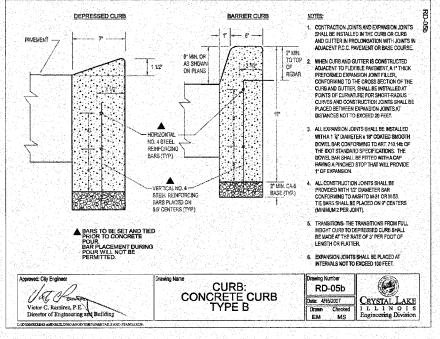
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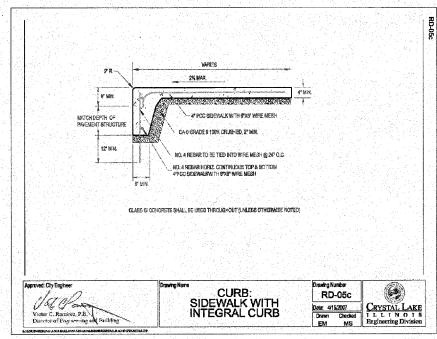
EFS 2015-013

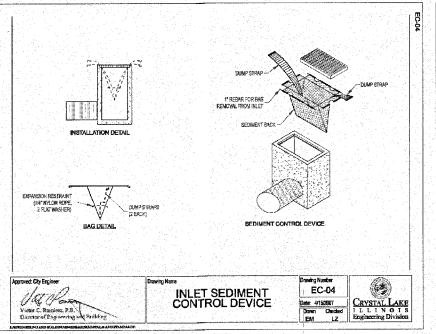
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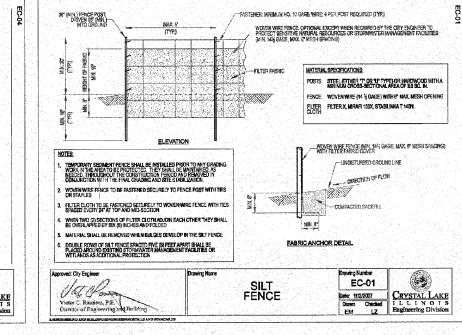


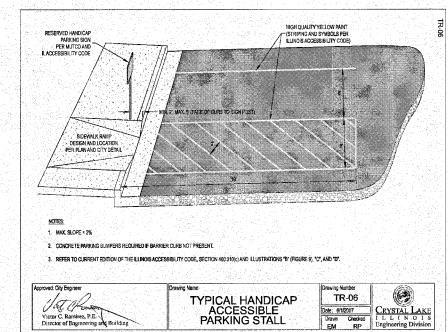


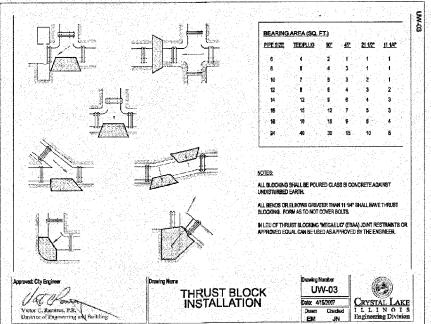


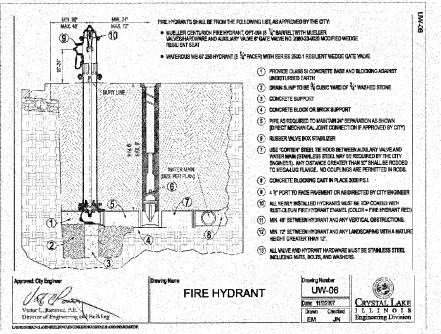












REVIEW SET NOT FOR CONSTRUCTION

2015/2015-013/dwg/2015-013 DET.dwg, DET, 10/28/2015 8:41:48 AM, SJP

SJP
DESIGNED EFS
PROJECT NO.

T UCTION PROJECT NO. 2015-013 SHEET 7 7

CONSULTANTS, INC.

INTECH C
1989 UNIVERSITY LANE,
LISLE, ILLINOIS 60532
PHONE: 630-964-5656

TUTERA SENIOR LIVING 7611 STATE LINE ROAD SUITE 301 KANSAS CITY, MO 64114

CRYSTAL PINES
PARKING LOT ADDITION

DETAIL

NONE

10-28-15